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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/014,914      | 10/22/2001  | Justin R. Morris     | ARK007/96868B       | 4208             |

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EXAMINER

GELLNER, JEFFREY L

ART UNIT PAPER NUMBER

3643

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/014,914

Applicant(s)

MORRIS ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 23-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

PETER M. POON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olmo et al. (US 3,606,741) in view of Pellenc (EP 0053570 A1).

As to Claim 1, Olmo et al. discloses a shoot and fruit thinner (Figs. 1-8) comprising a draft vehicle (51 of Fig. 1) with an associated mobile power unit (col. 4 lines 35-36); a frame (61 and 62 of Fig. 1) supported by the vehicle, the frame having at least one rotary tool (63 or 64 of Fig. 1) depending therefrom, the tool adapted to selectively thin fruit (col. 2 lines 14-20). Not disclosed is the tool powered by the power unit and controls associated with the power unit for selectively manipulating the tool. Pellenc, however, discloses a shoot/fruit thinner powered by the power unit (Fig. 2) and controls associated with the power unit (inherent in hydraulics (12) controlled by unit (4) in Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the thinner of Olmo et al. by having the tool powered and controlled by the power unit as disclosed by Pellenc so as to allow for greater control of the tool when the unit is in motion.

As to Claim 2, Olmo et al. as modified by Pellenc further disclose the tool supported by an articulating arm (10 of Figs. 2 and 9 of Pellenc).

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As to Claim 3, Olmo et al. as modified by Pellenc further disclose a circular disc with a plurality of radially spaced apart fingers (16 of Fig. 2 of Pellenc).

As to Claim 5, the limitations of Claim 2 are disclosed as described above. Not disclosed is an oval chain with the plurality of spaced apart fingers. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by using a oval chain drive so as to have a drive mechanism which can be fixed quickly.

As to Claim 6, the limitations of Claim 1 are disclosed as described above. Not disclosed is the frame pivotally secured to the vehicle. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a frame use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the frame which is pivotal so that the thinner can adjust to vines of varying height.

As to Claim 7, Olmo et al. as modified by Pellenc further disclose the arm having upper and lower arms (region around 33 and leadline of 10 are upper and lower arms, respectively, Fig. 9 of Pellenc).

As to Claims 8 and 10, Olmo et al. as modified by Pellenc further disclose flexible 1<sup>st</sup> and 2<sup>nd</sup> fingers (Fig. 9 of Pellenc).

As to Claims 9 and 11, the limitations of Claims 8 and 10 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It

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would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

As to Claim 12, Olmo et al. as modified by Pellenc further disclose a guide wheel (56 of Fig. 1 of Olmo et al.) adapted to roll along a central wire on a trellis.

As to Claim 13, Olmo et al. as modified by Pellenc further disclose the tool supported by an articulating arm (10 of Figs. 2 and 9 of Pellenc).

As to Claim 14, Olmo et al. as modified by Pellenc further disclose a circular disc with a plurality of radially spaced apart fingers (16 of Fig. 2 of Pellenc).

As to Claim 16, the limitations of Claim 11 are disclosed as described above. Not disclosed is an oval chain with the plurality of spaced apart fingers. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by using a oval chain drive so as to have a drive mechanism which can be fixed quickly.

As to Claim 17, the limitations of Claim 13 are disclosed as described above. Not disclosed is the frame pivotally secured to the vehicle. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a frame use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the frame which is pivotal so that the thinner can adjust to vines of varying height.

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As to Claim 18, Olmo et al. as modified by Pellenc further disclose the arm having upper and lower arms (region around 33 and leadline of 10 are upper and lower arms, respectively, Fig. 9 of Pellenc).

As to Claim 19, Olmo et al. as modified by Pellenc further disclose flexible 1<sup>st</sup> and 2<sup>nd</sup> fingers (Fig. 9 of Pellenc).

As to Claims 20, the limitations of Claim 19 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

As to Claim 21, Olmo et al. as modified by Pellenc further disclose flexible 1<sup>st</sup> and 2<sup>nd</sup> fingers (Fig. 9 of Pellenc).

As to Claim 22, the limitations of Claim 21 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olmo et al. (US 3,606,741) in view of Pellenc (EP 0053570 A1) in further view of Mead et al. (US 4,383,400).

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As to Claim 4, the limitations of Claim 2 are disclosed as described above. Not disclosed is the tool a circular brush. Mead et al., however, discloses a tool as a circular brush (26 of Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tool of Olmo et al. as modified by Pellenc by having the tool a circular brush as disclosed by Mead et al. so that the thinner could reposition the shoots left on the vine.

As to Claim 15, the limitations of Claim 13 are disclosed as described above. Not disclosed is the tool a circular brush. Mead et al., however, discloses a tool as a circular brush (26 of Fig. 1) adapted to be rotated by the power unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tool of Olmo et al. as modified by Pellenc by having the tool a circular brush as disclosed by Mead et al. so that the thinner could reposition the shoots left on the vine.

#### *Allowable Subject Matter*

Claims 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Response to Arguments*

Applicant's arguments filed 18 November 2002 have been fully considered but they are not persuasive. Applicant's arguments are that (1) Olmo et al. is a fruit harvester and so not a fruit thinner (Remarks page 3 last two lines); (2) Olmo et al. can not be combined with Pellenc because the apparatus of Olmo et al. is for fruit harvesting and the apparatus of Pellenc is for

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raking the ground (Remarks page 4, 1<sup>st</sup> complete para.); and, (3) Mead's brushes are not designed to remove undesirable fruits as is Applicant's brushes (Remarks page 6, lines 8-12).

As to argument (1), Examiner considers the apparatus of Olmo et al. to function as a fruit thinner. Harvesting can be considered a form of thinning, especially, if some fruit is unintentionally left on the vine.

As to argument (2), Examiner is using the Pellenc reference for both a control unit and the articulating arm and fingers. Examiner considers Olmo et al., Pollenc, and Applicant's apparatus to be analogous art in that all use fingers to move objects at a distance.

As to argument (3), Examiner considers Olmo et al., Pollenc, and Applicant's apparatus to be analogous art in that all use fingers to move objects at a distance.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.




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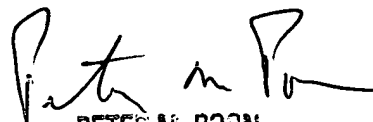
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 703.305.0053. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 703.308.2574. The fax phone numbers for the Technology Center where this application or proceeding is assigned are 703.305.7687, 703.305.3597, and 703.306.4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.



Jeffrey L. Gellner



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